RADARSAT Polar Science Gateway

Yves Crevier, Government-Related Initiatives Program (GRIP), Canadian Space Agency, John H. Chapman Space Center, 6767 route de l'Aéroport, St-Hubert, Québec J3Y 8Y9, yves.crevier@space.gc.ca; Paul Briand, Government-Related Initiatives Program (GRIP), Canadian Space Agency, John H. Chapman Space Center, 6767 route de l'Aéroport, St-Hubert, Québec J3Y 8Y9; paul.briand@space.gc.ca

In the context of the International Polar Year, the Canadian government has set aside \$150 million for Canadian-led activities. This fund is under the management of Indian and Northern Affairs.

The Canadian Space Agency has prepared a proposal concept called the RADARSAT Polar Science Gateway (RSAT PSG), which has been approved by the International IPY Committee and recognized as a meaningful contribution within the context of the ESA/Ohio State-led GIIPSY satellite support proposal.

The RSAT PSG aims to provide a single integrated source of RADARSAT-1 and 2 data and products for scientific research conducted in the context of IPY. The project will also develop unique content for the gateway based on RADARSAT time series data and interferometric analysis of glacial ice movement.

The main outputs of the RSAT PSG are:

- Radar imagery from RADARSAT-1 and 2 for polar science: Canadian Space Agency
- Third RADARSAT-1 Antarctic Mapping Mission: Canadian Space Agency
- Polar snapshot mosaics (time series): Canadian Ice Service
- Ocean and land ice and cryosphere products and derived geophysical parameters: Meteorological Research Division, Environment Canada and Canadian Space Agency
- Provision of portal infrastructure and services: private sector partner
- User requirements document for the RSAT PSG based on consultation process

The proposed paper will describe the various components of the RSAT PSG and how they will be implemented within the context of the IPY.